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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/023,678 | 12/18/2001 | Georgina Sweeney | 1713A1 | 3528 |

7590 04/19/2005

PPG INDUSTRIES, INC.
Intellectual Property Department
One PPG Place
Pittsburgh, PA 15272

EXAMINER

GODDARD, BRIAN D

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| ART UNIT | PAPER NUMBER |
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2161

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,678

Applicant(s)

SWEENEY ET AL.

Examiner

Brian Goddard

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,11-22,24-26 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,11-22,24-26 and 43-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. This communication is responsive to the Amendment filed 20 December 2004.
2. Claims 1, 3-8, 11-22, 24-26 and 43-47 are pending in this application. Claims 1, 16, 21 and 43 are independent claims. In the Amendment filed 20 December 2004, claims 2, 9, 10, 23 and 27-42 were cancelled; and claims 1, 3-8, 12-14, 16-19, 21, 24-26, 43, 45 and 46 were amended. This action is made Final.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 16-20 and 43-47 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0007289 to Malin et al.

Referring to claim 16, Malin discloses a method of tracking the repair process of a vehicle that is in a repair shop as claimed. See Figures 1-8 and the corresponding portions of the specification for this disclosure. Malin teaches a method [See Figs. 1 & 9] of tracking the repair process of a vehicle that is in a repair shop, comprising the steps of:

periodically electronically transferring [See ¶ 0034 & 0057-0058 and Steps 925-930] data on the status of a plurality of vehicles undergoing repair [repair status] to a database [750] on a computer [705];

determining the length of time ['cycle time'] that the status data for each vehicle remains unchanged ['dead time'] via software on the computer [statistical analysis module (See Figs. 2, 7 & 8)];

identifying a vehicle for which the status data is unchanged beyond a predetermined length of time [See ¶ 0052 & 0074]; and

determining the extent that the status data is unchanged [See ¶ 0064 and Claims 41-43] beyond a predetermined length of time [task deadline] as claimed.

Referring to claim 17, Malin teaches the method of claim 16, as above, wherein the status data is transferred daily [See Figs. 1 & 9] as claimed.

Referring to claim 18, Malin teaches the method of claim 16, as above, wherein the status data includes...[See Fig. 3] as claimed.

Referring to claim 19, Malin teaches the method of claim 16, as above, wherein said electronically transferring step comprises entering the status data into a data transfer device [Shop Terminal 220] and transferring [See Figs. 1 & 9, particularly Step 930] the data from the data transfer device [220] to a computer [705] as claimed.

Referring to claim 20, Malin teaches the method of claim 16, as above, wherein the database [750] stores an identifier for each vehicle [See ¶ 0045 and Figs. 3 & 7], the identifier being selected from the group consisting of vehicle make, vehicle model and vehicle year [See ¶ 0045] such that the software determines...[See discussion of claim 16 above] as claimed.

Claims 43-47 are rejected on the same basis as claims 16-20 respectively. See the discussions regarding claims 16-20 above for the details of this disclosure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3-8, 11-15, 21, 22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malin in view of U.S. Patent No. 6,516,239 to Madden et al.

Referring to claim 1, Malin discloses a method of determining the status of a vehicle undergoing repair substantially as claimed. See Figures 1-8 and the corresponding portions of the specification for this disclosure. Specifically, Malin teaches a method of determining the status of a vehicle undergoing repair [See Fig. 1] comprising the steps of:

maintaining a computer database [750] containing a vehicle identifier [See ¶ 0045 and Figs. 3 & 7] for a vehicle undergoing repair and repair status information [See Figs. 1, 3, 7 & 9] for the vehicle undergoing repair, the vehicle identifier comprising a repair order number [See Fig. 3];

electronically transferring [See ¶ 0034 & 0057-0058 and Steps 925-930] data on the status [repair status] of the vehicle undergoing repair to the computer database [750];

searching [See Step 935] the computer database [750] to locate the vehicle undergoing repair; and

identifying data on the status [requested status data is provided to the requester (See Steps 145 and 935)] of the vehicle undergoing repair.

Malin does not explicitly teach that the vehicle identifier comprises a vehicle identification number or a bar code as claimed. However, this is because Malin is only directly concerned with the tracking of individual repair orders and the generation of statistics therefrom. Madden discloses a system and method for tracking the status of a vehicle undergoing assembly/repair, similar to that of Malin, wherein a computer database [208] containing a vehicle identifier [See Column 7, line 29 et seq.] for a vehicle undergoing repair and repair status information [See Abstract, Summary & all portions of specification] for the vehicle undergoing repair is maintained, the vehicle identifier comprising a vehicle identification number [VIN (See Column 7, line 29 et seq.; Column 9, line 8 et seq.; etc.)) as claimed. Madden further discloses reasons for using

the VIN as an identifier for the vehicle, one being to track the repair history of the vehicle (See Abstract & Summary).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a vehicle identification number (VIN), such as in Madden, to Malin's database to obtain the invention as claimed. One would have been motivated to do so in order to efficiently track the entire repair history of the vehicle, in addition to tracking status of a single repair, as disclosed by Madden.

Referring to claim 3, Malin v. Madden teaches the method of claim 2, as above, further comprising "electronically transferring [See Step 935 & Figs. 7-8¹] the identified data to a remote location [735 (transferred from Platform Server 740 to Customer/3rd Party System 735)]" as claimed.

Referring to claim 4, Malin v. Madden teaches the method of claim 3, as above, further comprising electronically requesting [See Step 935] the status of the vehicle prior to said searching step [the database is searched for data that is requested] as claimed.

Referring to claims 5 and 6, Malin v. Madden teaches the method of claim 4, as above, wherein the steps are performed on a global computer communications network [710 (e.g. the Internet)] as claimed.

Referring to claims 7 and 8, Malin v. Madden teaches the method of claim 2, as above, wherein said transferring step comprises entering the status data on the vehicle status into a data transfer device [Shop Terminal 220] and transferring [See Figs. 1 & 9,

¹ All citations refer to the Malin reference unless otherwise noted.

particularly Step 930] the status data from the data transfer device [220] to the computer database [750], wherein the data transfer device is portable [See ¶ 0100] as claimed.

Referring to claims 11, Malin v. Madden teaches the method of claim 1, as above, wherein the status data includes...[See Fig. 3] as claimed.

Referring to claim 12, Malin v. Madden teaches the method of claim 11, wherein the vehicle undergoes repair steps ['tasks' based on the repair plan (See Figs. 1, 3 & 5-6)] corresponding to each of the information items (i)-(xx) of claim 11 [See Fig. 3 – the tasks in Malin's repair plan correspond exactly to those of items (i)-(xx) in claim 11] as claimed.

Referring to claim 13, Malin v. Madden teaches the method of claim 12, as above, wherein said repair steps are performed substantially in the order of information items (i)-(xx) listed in claim 11. Malin's (as modified by Madden) repair tasks are not explicitly disclosed in the exact sequence as that listed in the claim. However, the exact order of this sequence is nothing more than design choice, as long as the end result is the same (which is true of Malin v. Madden). That is, there is nothing unexpected or unobvious in performing the exact sequence as listed in the claim as opposed to the corresponding sequence as listed in Fig. 3 of Malin. Further, both Malin and Madden disclose that the tasks can be scheduled in any order, on a case-by-case basis depending on resources available and timing, to achieve the same end result. See Figs. 4-6 and the corresponding portions of Malin's specification, as well as the Abstract and Summary of Madden's specification, for this disclosure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to schedule

the sequence of tasks in Malin v. Madden to obtain the exact sequence of the claim, to maintain the premise of efficient repair disclosed in both, while still achieving the same end result.

Referring to claim 14, Malin v. Madden teaches the method of claim 12, as above, wherein the status of the vehicle is provided to the owner of the vehicle [See Step 145, Figs. 7-8, and Steps 935-945] following...any one of the repair steps [See ¶ 0064, 0080-0081 & 0090] as claimed.

Referring to claim 15, Malin v. Madden teaches the method of claim 14, as above, wherein the status of the vehicle is automatically provided [e.g. via electronic message (See Steps. 935 & 945 and Figs. 7-8)] to the owner of the vehicle as claimed.

Referring to claim 21, Malin v. Madden discloses the system for determining the status of a vehicle undergoing repair as claimed. See the discussions regarding claims 1, 3 and 7 above for the details of this disclosure.

Claim 22 is rejected on the same basis as claim 8, in light of the basis for claim 21. See the discussions regarding claims 1, 3, 7-8 and 21 above for the details of this disclosure.

Claim 24 is rejected on the same basis as claim 11, in light of the basis for claim 21. See the discussions regarding claims 1, 3, 7, 11 and 21 above for the details of this disclosure.

Claims 25-26 are rejected on the same basis as claims 12-13 respectively, in light of the basis for claim 24. See the discussions regarding claims 1, 3, 7, 11-13 and 24 above for the details of this disclosure.

Response to Arguments

6. Applicants' arguments with respect to claims 1, 3-8, 11-22, 24-26 and 43-47 have been considered but are moot in view of the new ground(s) of rejection.

Referring to applicants' remarks on page 9 regarding the subject matter of claims 11-14: Applicants argued that Malin fails to disclose the vehicle undergoing the particular repair steps set forth in claim 11...and, as such, claims 11-14 define over the Malin patent.

The examiner disagrees for the following reasons: Applicants' arguments amount to a mere allegation that the reference fails to show certain features of the claims. These allegations are completely unsubstantiated as no evidence, reasoning or logic is provided with regard to the disclosure of the Malin reference. Applicants have failed to rebut the *prima facie* case applied to these claims. Figures 1, 3-6, 7 and 9 of the Malin reference (particularly the repair tasks shown in Figure 3), as well as the portions of the specification corresponding thereto, show the limitations of claims 11-14 when combined with the Madden reference as above (See the grounds of rejection).

Referring to applicants' remarks on pages 9-10 regarding the subject matter of claim 16: Applicants argued that Malin fails to disclose determining the length of time that the status data for each vehicle tracked in the repair process remains unchanged, and determining the extent that the status data is unchanged beyond a predetermined length of time.

The examiner disagrees for the following reasons: Applicants have focused on one portion of Malin's specification, ignoring other more pertinent portions cited for this

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disclosure. Namely, applicants have focused on Malin's statistical calculations of overall cycle time and dead time that are used in evaluating the efficiency of a repair shop. However, Malin also maintains calculations of cycle time and dead time for individual repair orders (i.e. each vehicle tracked in the repair process), and even more importantly, cycle time and dead time for each individual repair task within a repair order. See claims 41-43 and paragraph 0064 (for example) of the Malin publication for this disclosure. Further, each of Malin's repair tasks has a deadline corresponding to an expected cycle time (i.e. 'start' to 'finish') within the repair order schedule. Thus, Malin does teach determining the length of time that the status data for each vehicle tracked in the repair process remains unchanged [dead time on a repair task], and determining the extent that the status data is unchanged beyond a predetermined length of time [the deadline (See ¶ 0064)] as claimed.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goddard whose telephone number is 571-272-4020. The examiner can normally be reached on M-F, 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bdg
13 April 2005


SAFET METJAHIC
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100